

## REMARKS

Claims 4-55, and 69-72 are pending. In the Final Office Action mailed on February 6, 2006 the Examiner took the following action:

(1) rejected claims 4-8, 13, 14, 16-18, 20, 26, 28-30, 36, 39,40, 45-47, 50,51, 69, 70 and 71 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,992,323 to Vogelesang et al (Vogelesang) in view of the Magellan Systems Int. publication describing M5 fibers (Magellan);

(2) rejected claims 21-25, 41, 42 and 72 under 35 U.S.C. §103(a) as being unpatentable over Vogelesang in view of Magellan Systems as applied to claims 4-8, 13, 14, 16-18, 20, 26, 28-30, 36, 39,40, 45-47, 50,51, 69, 70 and 71 above, and further in view of U.S. Patent No. 5,958,578 to Blohowiak et al (Blohowiak);

(3) rejected claims 9-12, 15, 19, 27, 31-35, 37, 38, 43, 44, 48, 49 and 52-55 under 35 U.S.C. §103(a) as being unpatentable over Vogelesang in view of Magellan as applied to claims 4-8, 13, 14, 16-18, 20, 26, 28-30, 36, 39,40, 45-47, 50,51, 69, 70 and 71 above, and further in view of U.S. Patent No. 6,114,050 to Westre et al (Westre).

Applicants respectfully request reconsideration and withdrawal of the rejections in view of the foregoing amendments and the following remarks.

### Vogelesang (U.S. Patent No. 4,992,323)

Vogelsang teaches a laminate composed two metal plates interconnected by an intermediate layer of thermoplastic material reinforced by continuous filaments. (Abstract of Vogelesang). In particular, Vogelesang teaches that "[a] preferable embodiment of the laminate is characterized according to the invention in that ...the diameter of the filaments being 5-25 microns more particularly 8-12 microns". (Vogelesang, col. 1, lines 12-18). "Optimum results

may be attained when use is made of a laminate which is characterized according to the invention in that the fibres consist of continuous filaments of aramid". (Vogelesang, col. 1, lines 21-24).

#### Magellan

Magellan teaches an example of a poly diimidazo pyridinylene or PIPD fiber that the Action relies upon in its rejection of all pending claims. Magellan's M5® fiber is teaches tat strength is received by hydrogen bonds in both the "X" and "Y" directions, where "Z" axis represents a rod-like polymer chain direction. "The effect of the hydrogen bonding is to connect the M5® molecules into a 3-dimensional or 'honeycomb' network." Magellan teaches that strength in the M5® fiber is achieved at the molecular level. In other words, the M5® fibers have no particular diameter nor is a particular diameter taught in the cited Magellan article.

Since Vogelesang teaches that continuous fibers or filaments having a particular diameter that ranges from 5-25 micros, it would not have been obvious to combine the teachings of Magellan, because Magellan suggests that the strength of fibers or elements exist at the molecular level. In other words, PIPD fibers such as M5® can have filament diameter that are smaller than the filament diameters taught by Vogelsang. Furthermore, there is no teaching or suggestion that PIPD fibers such as M5® are continuous fibers such as those taught in Vogelesang.

Accordingly, independent claims 4, 28, 45, and 69 which recite the element of "poly diimidazo pyridinylene" are allowable over the combination of Vogelesang and Magellan. Claims 5-27 depend from claim 4 and are allowable over the cited references due to their dependency on claim 4 and also due to additional limitations recited in those claims. Claims 29-44 depend from claim 28 and are allowable over the cited references due to their dependency on

claim 28 and also due to additional limitations recited in those claims. Claims 46-55 depend from claim 45 and are allowable over the cited references due to their dependency on claim 45 and also due to additional limitations recited in those claims. Claims 70-72 depend from claim 69 and are allowable over the cited references due to their dependency on claim 69 and also due to additional limitations recited in those claims.

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- 15 -

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### CONCLUSION

For the foregoing reasons, Applicant respectfully submits that pending claims 4-55, and 69-72 are now in condition for allowance. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,

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